

Application No.: 10/743,389

Docket No.: 21581-00310-US

REMARKS

Claims 1-3 and 7-11, 13-15, 17, 18 and 21 are now in the application.

Claims 1-3 and 7-10 were rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 3,964,936 to Das in view of WO01/48264 to Sako. The cited references fail to render obvious claims 1, 3 and 7-10.

In particular, the present invention relates to a chemical conversion coating agent consisting of at least one kind selected from the group consisting of zirconium, titanium and hafnium in specific amounts; fluorine; and a water-soluble epoxy compound containing an isocyanate group, in specific amounts. Thereby, the chemical conversion coating agent of the present invention can provide good chemical conversion treatment to a variety of metals such as iron, zinc and aluminum without chromium.

Das suggests a coating solution containing zirconium for forming on an aluminum surface a coating which is corrosion resistant. However, it does not disclose that this solution can be applied to an iron surface or zinc surface for forming a coating. As appreciated by the Examiner, Das fails to teach an organic resin comprising an epoxy compound an isocyanate group.

The present invention provides a treatment agent which is used for treatment of not only a surface of aluminum substrate, but also a surface of iron and zinc substrates. It has been found according to the present invention that adding an epoxy resin provides good effect on any substrates of aluminum, iron or zinc in such a treatment agent. Such an epoxy resin as in the present invention, especially, can give the desired effects.

Sako suggests the use of an epoxy resin as an optional component in compositions for the treatment of iron substrates. However, Sako also states that the optional epoxy resin must be combined with other required specific components. Sako does not suggest that the epoxy can be used in a composition that does not include the other required components disclosed therein and therefore fails to meet the claimed recitation of "consists of". In fact, as mentioned above, the

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epoxy resin is not an essential component in Sako. Sako merely suggests a cationated epoxy resin that is used secondarily in a composition that essentially contains a vanadium compound and a phenol resin.

Furthermore, Sako discloses many kinds of "organic polymer component (D)", with a cationated epoxy resin being but one of them. For example see pages 11-13 of Sako. Among the "organic polymer component (D)" suggested in Sako, only a cationated epoxy resin can give the effect of the present invention. Nothing in Sako would lead one skilled in the art to select the type of epoxy employed in the present invention from the myriad of possibilities therein to achieve the results obtainable by the present invention.

Therefore, the present invention is not obvious from Das and Sako.

Claims 2, 11, 13-15, 17, 18 and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 3,964,936 to Das in view of WO01/48264 to Sako and further in view of US Patent 5,449,415 to Dolan. Dolan does not overcome the above discussed deficiencies of Das and Sako with respect to rendering unpatentable the above claims.

Dolan suggests a composition for treating metal surfaces containing zirconium, fluorine and silica. The compositions of Dolan essentially comprises phosphorus-containing inorganic oxyanions or phosphonate anions, (see claim 1, Abstract). On the other hand, a chemical conversion coating agent of the present invention preferably does not substantially contain phosphate ions, (please see page 19, line 29 to page. 20, line 6 of the specification). Therefore no motive exists to combine Dolan with Das and Sako.

Therefore, the present invention is not obvious from Das, Sako and Dolan.

The mere fact that the cited art may be modified in the manner suggested in the Office Action does not make this modification obvious, unless the cited art suggest the desirability of the modification or there is well reasoned and articulated rationale. This is not present in the present record. The Examiner's attention is kindly directed to *KSR Int'l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727; 82 USPQ2d 1385 (2007), *In re Lee* 61 USPQ2d 1430 (Fed. Cir. 2002), *In re*

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Dembiczak et al. 50 USPQ2d. 1614 (Fed. Cir. 1999), *In re Gordon*, 221 USPQ 1125 (Fed. Cir. 1984), *In re Laskowski*, 10 USPQ2d. 1397 (Fed. Cir. 1989) and *In re Fritch*, 23, USPQ2d. 1780 (Fed. Cir. 1992).

Also, the cited art lacks the necessary direction or incentive to those of ordinary skill in the art to render a rejection under 35 USC 103 sustainable. The cited art fails to provide the degree of predictability of success of achieving the properties attainable by the present invention needed to sustain a rejection under 35 USC 103. See *KSR Int'l Co. v. Teleflex, Inc.*, *supra*, *Diversitech Corp. v. Century Steps, Inc.* 7 USPQ2d 1315 (Fed. Cir. 1988), *In re Mercier*, 187 USPQ 774 (CCPA 1975) and *In re Naylor*, 152 USPQ 106 (CCPA 1966).

Moreover, the properties of the subject matter and improvements which are inherent in the claimed subject matter and disclosed in the specification are to be considered when evaluating the question of obviousness under 35 USC 103. See *KSR Int'l Co. v. Teleflex, Inc.*, *supra*; *Gillette Co. v. S.C. Johnson & Son, Inc.*, 16 USPQ2d. 1923 (Fed. Cir. 1990), *In re Antonie*, 195, USPQ 6 (CCPA 1977), *In re Estes*, 164 USPQ 519 (CCPA 1970), and *In re Papesch*, 137 USPQ 43 (CCPA 1963).

No property can be ignored in determining patentability and comparing the claimed invention to the cited art. Along these lines, see *In re Papesch*, *supra*, *In re Burt et al.*, 148 USPQ 548 (CCPA 1966), *In re Ward*, 141 USPQ 227 (CCPA 1964), and *In re Cescon*, 177 USPQ 264 (CCPA 1973).

In view of the above, consideration and allowance are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

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The Office is authorized to charge any necessary fees to Deposit Account No. 22-0185, under Order No. 21581-00310-US from which the undersigned is authorized to draw.

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Respectfully submitted,



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